



**CITY OF LODI
COUNCIL COMMUNICATION**

AGENDA TITLE: Adopt Resolution Amending Traffic Resolution 97-148 by Approving Speed Limit Modifications as Follows:

- Reduce Century Boulevard between West City Limits and Ham Lane from 45 to 40 Miles Per Hour
- Increase Century Boulevard between Hutchins Street and Church Street from 25 to 30 Miles Per Hour
- Increase Kettleman Lane between Beckman Road and East City Limits from 40 to 45 Miles Per Hour
- Reduce Loma Drive between Elm Street and Lockeford Street from 30 to 25 Miles Per Hour

MEETING DATE: August 2, 2006

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt a resolution amending Traffic Resolution 97-148 by approving speed limit modifications as follows (Exhibit A):

- Reduce Century Boulevard between West City Limits and Ham Lane from 45 to 40 Miles Per Hour
- Increase Century Boulevard between Hutchins Street and Church Street from 25 to 30 Miles Per Hour
- Increase Kettleman Lane between Beckman Road and East City Limits from 40 to 45 Miles Per Hour
- Reduce Loma Drive between Elm Street and Lockeford Street from 30 to 25 Miles Per Hour

BACKGROUND INFORMATION: Per the California Vehicle Code (CVC), Engineering and Traffic Surveys must be updated a minimum of every five years on all "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System. Streets with surveys that have exceeded five years cannot be radar enforced by the Police Department. The Police Department relies on these surveys not only for speed enforcement purposes, but for use in the courtroom in the event of a dispute from the person cited. The posting of speed limits are also coordinated with the Police Department due to their field expertise. In accordance with the CVC, speed limits on the following eleven streets have been surveyed based on the time frame (5 years) from the last survey:

- | | |
|--|---|
| • Century Boulevard | • Lockeford Street |
| • Cluff Avenue, Lodi Avenue to Turner Road | • Loma Drive |
| • Eilers Lane | • Rutledge Drive |
| • Ham Lane | • Sacramento Street, Lodi Avenue to Turner Road |
| • Holly Drive | • Stockton Street |
| • Kettleman Lane, Highway 99 to East City Limits | |

In accordance with CVC Section 40802 (b), Engineering and Traffic Surveys are performed in the City of Lodi following the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) California Supplement. Important factors to consider in determining the speed limit, which is most appropriate to facilitate the orderly movement of traffic and reasonably safe, are:

Prevailing Speeds (85th Percentile Speeds) – Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest 5 mph increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of 5 mph.

APPROVED:  _____
Blair King, City Manager

Adopt Resolution Amending Traffic Resolution 97-148 by Approving Speed Limit Modifications as Follows:

- Reduce Century Boulevard between West City Limits and Ham Lane from 45 to 40 Miles Per Hour
- Increase Century Boulevard between Hutchins Street and Church Street from 25 to 30 Miles Per Hour
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August 2, 2006

Page 2

Accidents – Accident records for two recent years are considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.8 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver are also considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

In addition to the three primary factors described above, the following characteristics are also considered:

- Residential density
- Pedestrian and bicycle safety
- Roadway design speed
- Safe stopping sight distance
- Superelevation
- Shoulder conditions
- Profile condition
- Intersection spacing and offsets
- Commercial driveway characteristics
- Pedestrian traffic in the roadway without sidewalks

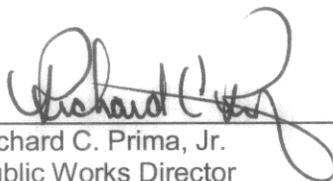
DISCUSSION/RECOMMENDATION: In May 2004, California adopted a new traffic manual which included changes in some of the guidelines used to establish speed limits. The major change was the relationship between the 85th percentile speed and selected speed limit. The previous guidelines indicated speed limits should normally be established at the first 5 mph increment below the 85th percentile speed. The current guidelines indicate speed limits should be established at the nearest 5 mph increment to the 85th percentile speed. While this change could potentially raise speed limits by 5 mph, the new guidelines consider residential density and bicycle and pedestrian safety as reasons to reduce speed limits. Therefore, in many cases, these changes offset each other, resulting in little effect on existing speed limits. A map showing existing and proposed speed limits is attached as Exhibit B.

While most of Lockeford Street was surveyed, the portion of Lockeford Street between Church Street and Stockton Street is due to be surveyed, but was not due to the current construction of a traffic signal at the intersection of Sacramento Street. This portion will be surveyed following the completion of the traffic signal this summer. Until then, the posted 30 mph speed limit will not be radar enforceable.

FISCAL IMPACT: None.

FUNDING AVAILABLE: Funding for the modifications to speed limit signs and pavement legends from the Street Maintenance Account at an approximate cost of \$2,070.


Ruby Paiste, Interim Finance Director


Richard C. Prima, Jr.
Public Works Director

Prepared by Rick S. Kiriu, Senior Engineering Technician
RCP/RSK/pmf
Attachments

cc: City Attorney
Street Superintendent

Police Chief
Senior Traffic Engineer

City Engineer
Police Sergeant Carillo

SPEED ZONE REPORT - Century Boulevard

- REFERENCE – Speed zone surveys are performed in the City of Lodi following the Federal Highway Administration MUTCD and MUTCD California Supplement in accordance with Section 40802 (b) of the California Vehicle Code.
- STUDY CRITERIA – Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are:

Prevailing Speeds (85th Percentile Speeds) – Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest five mile per hour (mph) increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five mph.

Accidents – Accident records for two recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.8 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors – The following factors were considered: residential density, pedestrian and bicycle safety, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics and pedestrian traffic in the roadway without sidewalks.

- STUDY RESULT
Ten radar surveys were performed and the 85th percentile speeds ranged from 33 to 48 mph as shown below.

<u>Street Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
Lower Sacramento Road to Mills Avenue	47 mph	48 mph
Mills Avenue to Ham Lane	44 mph	42 mph
Ham Lane to Hutchins Street	40 mph	40 mph
Hutchins Street to Church Street	34 mph	33 mph
Stockton Street to Cherokee Lane	41 mph	42 mph

Lower Sacramento Road to Mills Avenue

The 85th percentile speeds on this segment are 47 and 48 mph. The 50th percentile speeds are 42 and 44 mph. The west portion of this segment of Century Boulevard was extended to Lower Sacramento Road in December of 2005. There were no accidents occurring on this segment since that time. The portion extended to Lower Sacramento Road was constructed to one-half of the future width

when fully developed and lacks sidewalk. Based solely on prevailing speeds, the speed limit could be set at 45 mph; however, due to the roadside conditions with no sidewalks, lack of accident history, and bicycle safety, we recommend a 40 mph speed limit in this segment.

Mills Avenue to Ham Lane

The 85th percentile speeds on this segment are 42 and 44 mph. The 50th percentile speeds are 37 and 38 mph. The accident rate of 2.3 on this segment is below the Citywide average and higher than the 0.8 rate from the 2002 survey. Based on prevailing speeds, we recommend reducing the speed limit in this segment from 45 to 40 mph.

Ham Lane to Hutchins Street

The 85th percentile speed on this segment is 40 mph. The 50th percentile speed is 35 mph. The accident rate of 5.2 on this segment is above the Citywide average but lower than the 5.7 rate from the 2002 survey. Based solely on prevailing speeds, the speed limit could be posted at 40 mph; however, due to the continuing higher than average accident rate and bicycle safety, we recommend retaining the 35 mph speed limit in this segment.

Hutchins Street to Church Street

The 85th percentile speeds on this segment are 33 and 34 mph. The 50th percentile speeds are 29 and 31 mph. The accident rate of 3.8 on this segment is equal to the Citywide average and lower than the 6.2 rate from the 2002 survey. Based solely on prevailing speeds, the speed limit could be posted at 35 mph; however, based on residential density and bicycle safety, we recommend a 30 mph speed limit in this segment.

Stockton Street to Cherokee Lane

The 85th percentile speeds on this segment are 41 and 42 mph. The 50th percentile speed is 37 mph. The accident rate of 0.8 on this segment is below the Citywide average and higher than the 0.0 rate from the 2002 survey. Based on prevailing speeds and continuing low accident rate, we recommend retaining the 40 mph speed limit in this segment.

o CONCLUSION

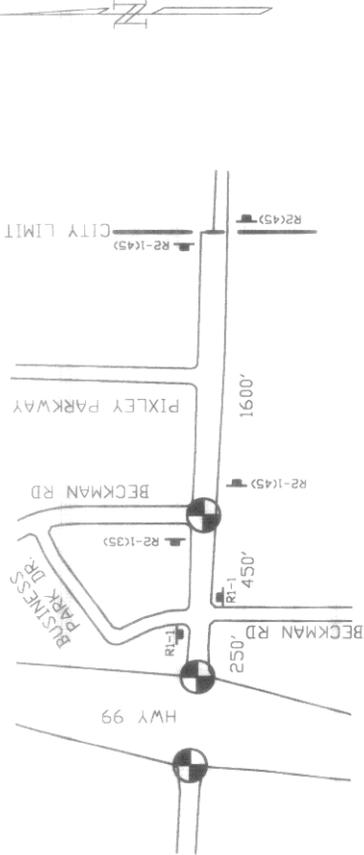
The recommended speed limits are shown below:

<u>STREET SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
Lower Sacramento Road to Mills Avenue	40 mph
Mills Avenue to Ham Lane	45 to 40 mph
Ham Lane to Hutchins Street	35 mph (no change)
Hutchins Street to Church Street	25 to 30 mph
Stockton Street at Cherokee Lane	40 mph (no change)

F. Wally Sandelin
City Engineer

ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION

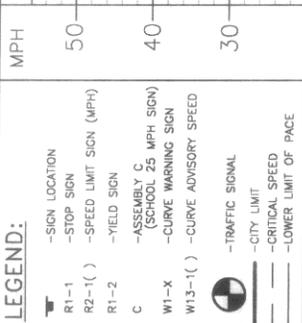


KETTLEMAN LANE

ROADWAY WIDTH	80' - 85'	85' - 25'
NO. OF LANES	4	2
MEDIAN (TYPE)	RAISED CONC	NONE
TRAFFIC SIGNAL DATA	3øACT	3øACT
AVERAGE DAILY TRAFFIC	16,840	10,720
OBS. SPEED - CRITICAL, 85th% EB	39	53
WB	33	49
- PACE (%) EB	27 - 37(76)	43 - 53(67)
WB	22 - 32(79)	38 - 48(66)
- MEDIAN, 50th% EB	34	48
WB	28	42

EXISTING SPEED ZONE (STATE) 35 MPH → 35 MPH → 40 MPH → 45 MPH (COUNTY)
 PROPOSED SPEED ZONE (STATE) 35 MPH → 35 MPH → 45 MPH → 45 MPH (COUNTY)

SPEED GRAPH



MPH

- LEGEND:**
- SIGN LOCATION
 - R1-1 - STOP SIGN
 - R2-1() - SPEED LIMIT SIGN (MPH)
 - R1-2 - YIELD SIGN
 - C - ASSEMBLY C (SCHOOL 25 MPH SIGN)
 - W1-X - CURVE WARNING SIGN
 - W13-1() - CURVE ADVISORY SPEED
 - TRAFFIC SIGNAL
 - CITY LIMIT
 - CRITICAL SPEED
 - LOWER LIMIT OF PACE

ACCIDENT PLOT YR: 2004

YR: 2005

ACCIDENT RATE - ACC./MILL. VEH.-MI.

DR: RSK

DN:

DATE: AUGUST 2006

Appr

Revision

Approved By

City Engineer REC. NO. 39865

Date



CITY OF LODI
PUBLIC WORKS DEPARTMENT

KETTLEMAN LN
Highway 99 to East City Limits

SPEED ZONE SURVEY

SPEED ZONE REPORT - Kettleman Lane, Highway 99 to East City Limits

- REFERENCE – Speed zone surveys are performed in the City of Lodi following the Federal Highway Administration MUTCD and MUTCD California Supplement in accordance with Section 40802 (b) of the California Vehicle Code.
- STUDY CRITERIA – Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are:

Prevailing Speeds (85th Percentile Speeds) – Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest five mile per hour (mph) increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five mph.

Accidents – Accident records for two recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.8 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors – The following factors were considered: residential density, pedestrian and bicycle safety, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics and pedestrian traffic in the roadway without sidewalks.

- STUDY RESULTS
Four radar surveys were performed and the 85th percentile speeds ranged from 33 to 53 mph as shown below:

<u>Street Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
Highway 99 to Beckman Road (north)	39 mph	33 mph
Beckman Road (north) to East City Limits	53 mph	49 mph

Highway 99 to Beckman Road (north)

The 85th percentile speeds on this segment are 33 and 39 mph and the 50th percentile speeds are 28 and 34 mph. The accident rate of 1.8 in this segment is lower than the Citywide average and below the 5.5 rate from the 2001 survey. Based on prevailing speeds and reasonable accident rate at the current speed limit, we recommend retaining the 35 mph speed limit in this segment.

Beckman Road (north) to East City Limits

The 85th percentile speeds on this segment are 49 and 53 mph. The 50th percentile speeds are 42 and 48 mph. The accident rate of 0.8 is significantly lower than the Citywide average and similar to the 0.6 rate from the 2001 survey. Based solely on the 85th percentile speeds, the speed limit on this segment could be set at 50 mph; however, the speed limit west of Beckman Road is 35 mph and the county speed limit east of the city is 45 mph. This would result in a relatively short 50 mph speed limit section in between two lower speed limits. Based on these factors, we recommend a 45 mph speed limit in this segment.

o CONCLUSION

The recommended speed limits are shown below:

STREET SEGMENT

Highway 99 to Beckman Road
Beckman Road to East City Limits

POSTED SPEED LIMIT

35 mph (no change)
40 to 45 mph

F. Wally Sandelin
City Engineer

**ENGINEERING
AND TRAFFIC SURVEY**

SEE NARRATIVE FOR
BACKGROUND INFORMATION



SPEED TABLE

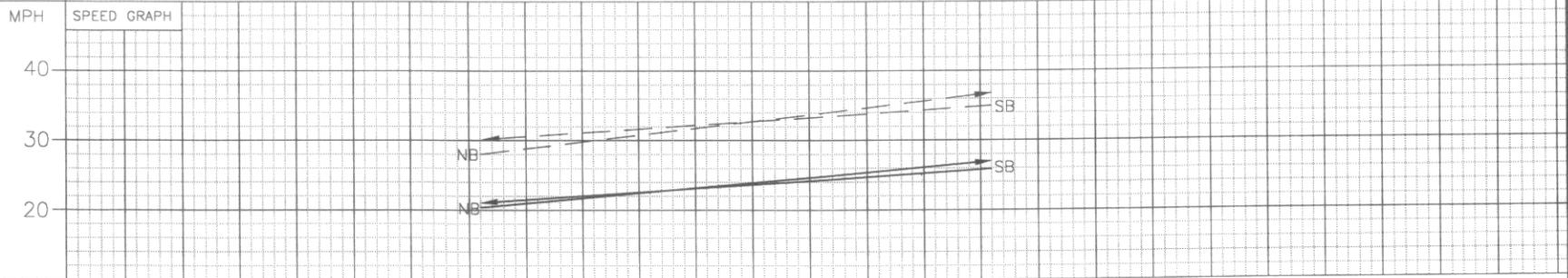
ROADWAY WIDTH	36' 39' 45' 46'	
NO. OF LANES	2	
MEDIAN (TYPE)	NONE	
TRAFFIC SIGNAL DATA	NONE	
AVERAGE DAILY TRAFFIC	775	1,000
OBS. SPEED—CRITICAL, 85th% NB	28	37
SB	30	35
—PACE(%) NB	20-30(89)	27-37(73)
SB	21-31(75)	26-36(85)
—MEDIAN, 50th% NB	27	32
SB	25	31

EXISTING SPEED ZONE

PROPOSED SPEED ZONE

LEGEND:

- SIGN LOCATION
- R1-1 —STOP SIGN
- R2-1() —SPEED LIMIT SIGN (MPH)
- R1-2 —YIELD SIGN
- C —ASSEMBLY C (SCHOOL 25 MPH SIGN)
- W1-X —CURVE WARNING SIGN
- W13-1() —CURVE ADVISORY SPEED
- TRAFFIC SIGNAL
- CITY LIMIT
- CRITICAL SPEED
- LOWER LIMIT OF PACE



ACCIDENT PLOT YR: 2004

YR: 2005

ACCIDENT RATE—ACC./MILL. VEH.—MI.

0	0
1 1 1	1
32.9	3.0

DR: RSK	No.	Date	Revision	Appr	Approved By
CH: PJF					
DATE: AUGUST 2006					Date



CITY OF LODI
PUBLIC WORKS DEPARTMENT

LOMA DR

**SPEED
ZONE
SURVEY**

SPEED ZONE REPORT - Loma Drive

- REFERENCE - Speed zone surveys are performed in the City of Lodi following the Federal Highway Administration MUTCD and MUTCD California Supplement in accordance with Section 40802 (b) of the California Vehicle Code.
- STUDY CRITERIA - Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are:

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest five mile per hour (mph) increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five mph.

Accidents - Accident records for two recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.8 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors - The following factors were considered: residential density, pedestrian & bicycle safety, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics and pedestrian traffic in the roadway without sidewalks.

- STUDY RESULTS
Four radar surveys were performed and the 85th percentile speeds ranged from 28 to 37 mph as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Elm Street to Lockeford Street	28 mph	30 mph
Lockeford Street to Turner Road	37 mph	35 mph

Elm Street to Lockeford Street

The 85th percentile speeds on this segment are 28 and 30 mph. The 50th percentile speeds are 25 and 27 mph. The accident rate of 32.9 is significantly higher than the citywide average and the 0.0 rate from the 2001 survey. Based solely on the 85th percentile speeds, the speed limit could be set at 30 mph; however, due to the high accident rate and residential density, we recommend reducing the speed limit from 30 to 25 mph in this segment.

Lockeford Street to Turner Road

The 85th percentile speeds on this segment are 35 and 37 mph. The 50th percentile speeds are 31 and 32 mph. The accident rate of 3.0 is below the Citywide average. There were no accidents during the previous survey performed in 2001. Based solely on the 85th percentile speeds the speed limit could be set at 35 mph; however, due to the increased accident rate and residential density, we recommend retaining the 30 mph speed limit in this segment.

o CONCLUSION

The recommended speed limits are shown below:

STREET SEGMENT

Elm Street to Lockeford Street

Lockeford Street to Turner Road

POSTED SPEED LIMIT

30 mph to 25 mph

30 mph (no change)

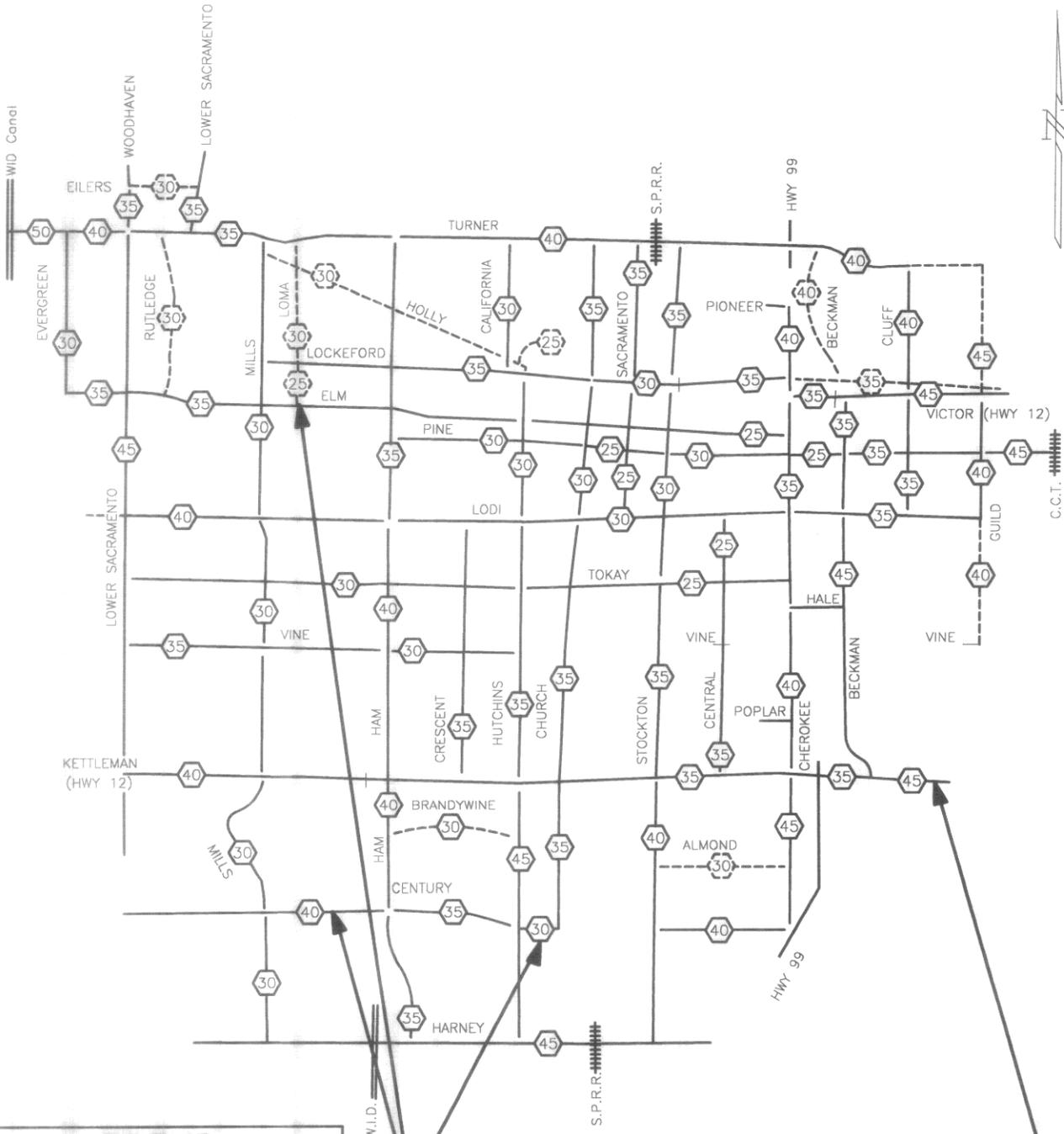
F. Wally Sandelin
City Engineer



CITY OF LODI

PUBLIC WORKS DEPARTMENT

POSTED SPEED LIMITS



LEGEND	
	STREET WITH SPEED ZONE (NON-LOCAL STREET)
	"LOCAL" STREET WITH SPEED ZONE (VC 40802)
PRIMA FACIE LIMITS APPLY TO STREETS NOT SHOWN - ALL "LOCAL" STREETS	

Proposed Speed Limit Modifications

RESOLUTION NO. 2006-151

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING SPEED
LIMIT MODIFICATIONS ON CENTURY BOULEVARD AND KETTLEMAN
LANE, AND THEREBY AMENDING TRAFFIC RESOLUTION NO. 97-148

WHEREAS, pursuant to §40802(b) of the California Vehicle Code, engineering and traffic surveys must be updated a minimum of every five years on all "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System, and speed limits on streets where surveys are older than five years cannot be enforced using radar; and

WHEREAS, based on the results of the speed survey recently performed, staff recommends the speed limit modifications as follows:

Street Segment

Century Boulevard between Hutchins Street and Church Street	25 to 30 mph
Kettleman Lane between Beckman Road and east City limits	40 to 45 mph

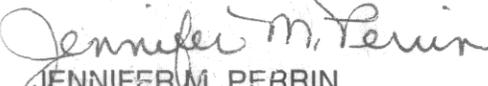
NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lodi does hereby approve the speed limit modifications on portions of Century Boulevard and Kettleman Lane as shown above; and

BE IT FURTHER RESOLVED that the City of Lodi Traffic Resolution No. 97-148, Section 7, "Speed Limits," is hereby amended by designating speed limit modifications as shown above.

Dated: August 2, 2006

I hereby certify that Resolution No. 2006-151 was passed and adopted by the City Council of the City of Lodi in a regular meeting held August 2, 2006, by the following vote:

AYES: COUNCIL MEMBERS – Beckman, Hansen, Johnson, and Mayor Hitchcock
NOES: COUNCIL MEMBERS – Mounce
ABSENT: COUNCIL MEMBERS – None
ABSTAIN: COUNCIL MEMBERS – None


JENNIFER M. PERRIN
Interim City Clerk

RESOLUTION NO. 2006-152

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING SPEED
LIMIT MODIFICATIONS ON CENTURY BOULEVARD AND LOMA
DRIVE, AND THEREBY AMENDING TRAFFIC RESOLUTION NO. 97-148

WHEREAS, pursuant to §40802(b) of the California Vehicle Code, engineering and traffic surveys must be updated a minimum of every five years on all "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System, and speed limits on streets where surveys are older than five years cannot be enforced using radar; and

WHEREAS, based on the results of the speed survey recently performed, staff recommends the speed limit modifications as follows:

Street Segment

Century Boulevard between west City limits and Ham Lane	45 to 40 mph
Loma Drive between Elm Street and Lockeford Street	30 to 25 mph

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lodi does hereby approve the speed limit modifications on portions of Century Boulevard and Loma Drive as shown above; and

BE IT FURTHER RESOLVED that the City of Lodi Traffic Resolution No. 97-148, Section 7, "Speed Limits," is hereby amended by designating speed limit modifications as shown above.

Dated: August 2, 2006

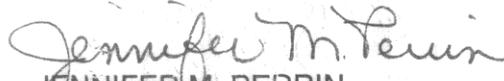
I hereby certify that Resolution No. 2006-152 was passed and adopted by the City Council of the City of Lodi in a regular meeting held August 2, 2006, by the following vote:

AYES: COUNCIL MEMBERS – Beckman, Hansen, Johnson, Mounce,
and Mayor Hitchcock

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None


JENNIFER M. PERRIN
Interim City Clerk